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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/843,838 | 04/30/2001 | Hideyuki Ijiri | 50212-227 | 1916 |

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EXAMINER

HOFFMANN, JOHN M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1731

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/843,838

Applicant(s)

IJIRI ET AL

Examiner

John Hoffmann

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Priority

Applicant is hereby required to submit sufficient evidence to prove the international application was copending with the U.S. National application claim benefit under 35 USC 120. The authority for Examiner to require such (and an explanation as to how applicant can meet this requirement) is contained in MPEP 1895.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Onishi WO99/40037.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

This rejection relies on Onishi 6474108 as a translation as to what WO99/40037 discloses. Looking to figure 2: S3 and S4 constitute the first/collapsing step. S5 is the second step/second collapsing. Claim 1 also requires elongating until a predetermined

Art Unit: 1731

outer diameter is obtained: this is not disclosed in figure 1, but is disclosed at col. 5, lines 20-34.

Claim 2: see col. 5, lines 27-28

Claim 3: see the paragraph spanning cols. 5-6. One could arbitrarily designate a portion of the outer layer that has a thickness that ranges at one end to be 1.0 mm to 2.5mm at the other end. The claim does not require any boundary which defines the portions that is etched.

Claim 9: see col. 7, lines 59-61.

Claim 11: see col. 5, line 30.

Claims 1- 2 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroo 62-167235 (or the Hiroo abstract).

The English language abstract provided by applicant clearly teaches the invention of claim 1. Examiner has ordered a translation of the Japanese document. Applicant is invited to call examiner for a faxed copy of the translation after 7 November 2003.

Claim 2: Hiroo etches with HF.

Claim 9: The converting the preform into a fiber reads on the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1731

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroo JP 62-167235 (or the Hiroo abstract).

Claim 3. It is unclear what size the Hiroo preform is. It would have been obvious to make the preform as large as one desires (i.e. at least 2.5 mm in diameter) so as to make as much as fiber as one desires. With such a preform one can arbitrarily designate one portion to be 1 mm thick and another portion 2.5 millimeters, and then designate the portion between the portions to have a gradual change in thickness so that that all thicknesses between 1 mm and 2.5mm are represented in the preform as required by the claims.

Claims 4-5: it appears that the upper right section of page 4 discloses an OH content of 0.5 ppm. Alternatively, the abstract discloses the removal of OH. It would have been obvious to have as low an OH level as possible, because of the known detrimental effect of OH on signals propagating through long distances of fiber.

Claims 6-8 are concerned with the diameters of the various bodies. The Hiroo drawings appear to show the claimed sizes/relationships. But even without the drawings, the sizes would have been obvious depending upon how large of preform is desired, and what size intermediate bodies are available or are most conveniently created.

Claim 9, it would have been obvious to elongate the preform into fiber, because that is the intended use of a fiber preform.

Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroo JP 62-167235 (or the Hiroo abstract) in view of Berkey 5894537.

Hiroo discloses the invention as discussed above. Hiroo does not disclose depositing a soot body as recited in claim 10. Berkey discloses depositing soot so as to insure/create a uniform substantially cylindrical outer surface; see col. 3, lines 50-32 and/or col. 12, 19-24. It would have been obvious to deposit soot on the out side of Hiroo so as to create or insure a cylindrical outer surface, and/or to increase the size of the preform.

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroo (or the Hiroo abstract) as applied to claim 1 and further in view of Kyoto 5221309.

Hiroo does not disclose the dopants. From col. 1, line 55 to col. 2, line 31, Kyoto discloses the advantage of using a pure silica core with a fluorine-doped clad: to reduce Rayleigh scattering. It would have been obvious to use fluorine doped claddings in the Hiroo invention for the advantage of Kyoto.

Claim 14: it is deemed that claim 14 is a open-ended group: the "and" signifies that applicant did not intend the two items to be alternates. Therefore the group is open to other elements - including fluorine -doped silica.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 14 appear to have groupings that have characteristics of Markush groups, but are not of any of MPEP-recognized forms for proper groupings. Examiner can only guess as to what was intended. If none of the MPEP recognized forms for alternate expressions can adequately cover what applicant desires to cover, applicant may contact examiner for assistance in constructing definite language.

Conclusion

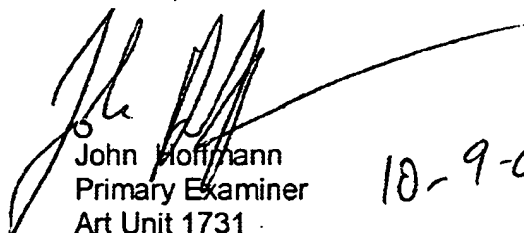
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The two other Berkey, Hicks, Shimizu and Glodis are cited as being of general interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

Art Unit: 1731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


John Hoffmann
Primary Examiner
Art Unit 1731

10-9-03

jmh